

We claim:

- 1 1. An additional contacting for an electrical component, especially for a
2 piezoelectric component in the form of a multilayer structure, comprising more
3 than one connecting element for connecting the electrical component with an
4 electrical connection element, wherein the additional contacting is embodied as
5 a single, structured component.
- 1 2. The additional contacting according to Claim 1, wherein the additional
2 contacting is embodied as a single, structured foil.
- 1 3. The additional contacting according to Claim 1, wherein each connecting
2 element is connected to a single, shared current conductor track.
- 1 4. The additional contacting according to Claim 3, wherein the current conductor
2 track has a greater width compared to each connecting element.
- 1 5. The additional contacting according to Claim 3, wherein the width of the current
2 conductor track changes over the length of the current conductor track.
- 1 6. The additional contacting according to Claim 3, wherein the structured
2 component comprises a contacting zone in which an electrical access element
3 can be located.
- 1 7. The additional contacting according to Claim 3, wherein the additional
2 contacting is formed in at least some areas from a material with higher electrical
3 conductivity.
- 1 8. The additional contacting according to Claim 7, wherein the additional
2 contacting is formed from at least one material from the group Cu, Cu alloy, Fe,
3 steel, Ni basic alloy, Co basic alloy.

- 1 9. The additional contacting according to Claim 1, wherein the additional
2 contacting is surrounded in at least some areas by a passivation material.

- 1 10. A multilayer construction piezoelectric component in which a piezoelectric
2 ceramic layer and an electrode layer are always arranged alternately one above
3 the other to form a stack, in which at least one first electrode layer and at least
4 one second electrode layer following on from it in the stack adjacent to the first
5 electrode layer are each connected for electrical contacting in alternating polarity
6 with at least one metalization located to the side of the stack with each
7 metalization being connected via an additional contacting with more than one
8 connecting element connected electrically to an access element, wherein the
9 additional contacting is embodied as a single, structured component.
- 1 11. The piezoelectric component according to Claim 10, wherein the stack is located
2 on a base plate, preferably on a static base plate.
- 1 12. The piezoelectric component according to Claim 10, wherein the base plate
2 comprises at least one through-hole for the access element.
- 1 13. The piezoelectric component according to Claim 10, wherein the additional
2 contacting is embodied as a single structured foil that each connecting element is
3 connected to a single shared current conductor track and the current conductor
4 track in relation to each connecting element is embodied on the side of the
5 additional contacting away from the stack.
- 1 14. The piezoelectric component according to Claim 13, wherein each connecting
2 element on the side of the additional contacting away from the stack is
3 connected with the at least one metalization.
- 1 15. The piezoelectric component according to Claim 13, wherein the current
2 conductor track is aligned in parallel to the lengthwise alignment of the stack.

- 1 16. The piezoelectric component according to Claim 13, wherein the stack is located
2 on a base plate, preferably on a static base plate, the base plate features at least
3 one through-hole for the access element, and the width of the current conductor
4 track seen from the free end of the stack increases in the direction of the base
5 plate.
- 1 17. The piezoelectric component according to Claim 11, wherein the additional
2 contacting comprises a contacting zone, the contacting zone is located in the
3 area of the base plate, and wherein the access element is connected with the
4 contacting zone.
- 1 18. The piezoelectric component according to Claim 10, wherein the additional
2 contacting is at least in some areas surrounded by a passivation material and the
3 stack and the additional contacting are preferably located in an individual
4 enclosure made from passivation material.
- 1 19. The piezoelectric component according to Claim 10, wherein the contacting
2 zone of the additional contacting in its initial state, seen from the free end of the
3 stack extends beyond the stack and that the access element is located on the back
4 of the contacting zone.
- 1 20. The piezoelectric component according to Claim 10, wherein the piezoelectric
2 component is embodied as a piezoelectric actor or piezoelectric converter.